



MAY 28 2002

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## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/935,371

DATE: 02/08/2002

TIME: 11:40:27

Input Set : N:\Crf3\RULE60\09935371.raw

Output Set: N:\CRF3\02082002\I935371.raw

## SEQUENCE LISTING

## 4 (1) GENERAL INFORMATION:

- 6 (i) APPLICANT: ONDA, Haruo  
 7 OHTAKI, Tetsuya  
 8 MASUDA, Yasushi  
 9 KITADA, Chieko  
 10 ISHIBASHI, Yoshihiro  
 11 HOSOYA, Masaki  
 12 OGI, Kazuhiro  
 13 MIYAMOTO, Yasunori  
 14 HABATA, Yugo  
 15 SHIMAMOTO, Norio
- 17 (ii) TITLE OF INVENTION: PACAP RECEPTER PROTEIN, METHOD FOR PREPARING  
 18 SAID PROTEIN, AND USE THEREOF
- 20 (iii) NUMBER OF SEQUENCES: 56
- 22 (iv) CORRESPONDENCE ADDRESS:  
 23 (A) ADDRESSEE: DAVID G. CONLIN; DIKE, BRONSTEIN, ROBERTS &  
 24 CUSHMAN  
 25 (B) STREET: 130 Water Street  
 26 (C) CITY: Boston  
 27 (D) STATE: Massachusetts  
 28 (E) COUNTRY: US  
 29 (F) ZIP: 02109
- 31 (v) COMPUTER READABLE FORM:  
 33 (A) MEDIUM TYPE: Diskette  
 34 (B) COMPUTER: IBM Compatible  
 35 (C) OPERATING SYSTEM: DOS  
 36 (D) SOFTWARE: FastSEQ for Windows Version 2.0
- 39 (vi) CURRENT APPLICATION DATA:  
 C--> 40 (A) APPLICATION NUMBER: US/09/935,371  
 C--> 41 (B) FILING DATE: 22-Aug-2001  
 42 (C) CLASSIFICATION:
- 44 (vii) PRIOR APPLICATION DATA:  
 45 (A) APPLICATION NUMBER: 09/201,474  
 46 (B) FILING DATE:
- 48 (viii) ATTORNEY/AGENT INFORMATION:  
 49 (A) NAME: RESNICK, David S.  
 50 (B) REGISTRATION NUMBER: 34235  
 51 (C) REFERENCE/DOCKET NUMBER: 44168-DIV
- 53 (ix) TELECOMMUNICATION INFORMATION:  
 54 (A) TELEPHONE: (617)523-3400  
 55 (B) TELEFAX: (617)523-6440
- 58 (2) INFORMATION FOR SEQ ID NO: 1:

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```

60      (i) SEQUENCE CHARACTERISTICS:
61          (A) LENGTH: 16 amino acids
62          (B) TYPE: amino acid
63          (D) TOPOLOGY: linear
64      (ii) MOLECULE TYPE: peptide
65      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1:
71      Met His Ser Asp Cys Ile Phe Lys Lys Glu Gln Ala Met Cys Leu Glu
72      1          5          10          15
73  (2) INFORMATION FOR SEQ ID NO: 2:
74      (i) SEQUENCE CHARACTERISTICS:
75          (A) LENGTH: 18 amino acids
76          (B) TYPE: amino acid
77          (D) TOPOLOGY: linear
78      (ii) MOLECULE TYPE: peptide
79      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2:
81      Ser Ser Pro Gly Cys Pro Gly Met Trp Asp Asn Ile Thr Cys Trp Lys
82      1          5          10          15
83      Pro Ala
84  (2) INFORMATION FOR SEQ ID NO: 3:
85      (i) SEQUENCE CHARACTERISTICS:
86          (A) LENGTH: 11 amino acids
87          (B) TYPE: amino acid
88          (D) TOPOLOGY: linear
89      (ii) MOLECULE TYPE: peptide
90      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3:
91      Val Gly Glu Met Val Leu Val Ser Cys Pro Glu
92      1          5          10
93  (2) INFORMATION FOR SEQ ID NO: 4:
94      (i) SEQUENCE CHARACTERISTICS:
95          (A) LENGTH: 16 amino acids
96          (B) TYPE: amino acid
97          (D) TOPOLOGY: linear
98      (ii) MOLECULE TYPE: peptide
99      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 4:
101     Phe Arg Ile Phe Asn Pro Asp Gln Val Trp Glu Thr Glu Thr Ile Gly
102     1          5          10          15
103  (2) INFORMATION FOR SEQ ID NO: 5:
104     (i) SEQUENCE CHARACTERISTICS:
105         (A) LENGTH: 21 amino acids
106         (B) TYPE: amino acid
107         (D) TOPOLOGY: linear
108     (ii) MOLECULE TYPE: peptide
109     (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 5:
111     Arg Asn Cys Thr Glu Asp Gly Trp Ser Glu Pro Phe Pro His Tyr Phe
112     1          5          10          15
113     Asp Ala Cys Gly Phe
114     20
115  (2) INFORMATION FOR SEQ ID NO: 6:
116     (i) SEQUENCE CHARACTERISTICS:

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149      (A) LENGTH: 21 amino acids
150      (B) TYPE: amino acid
151      (D) TOPOLOGY: linear
153      (ii) MOLECULE TYPE: peptide
157      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 6:
159      Asp Gln Asp Tyr Tyr Tyr Leu Ser Val Lys Ala Leu Tyr Thr Val Gly
160      1          5          10          15
162      Tyr Ser Thr Ser Leu
163      20
165 (2) INFORMATION FOR SEQ ID NO: 7:
167      (i) SEQUENCE CHARACTERISTICS:
168          (A) LENGTH: 50 amino acids
169          (B) TYPE: amino acid
170          (D) TOPOLOGY: linear
172      (ii) MOLECULE TYPE: peptide
176      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 7:
178      Thr Leu Thr Thr Ala Met Val Ile Leu Cys Arg Phe Arg Lys Leu His
179      1          5          10          15
181      Cys Thr Arg Asn Phe Ile His Met Asn Leu Phe Val Ser Phe Met Leu
182      20          25          30
184      Arg Ala Ile Ser Val Phe Ile Lys Asp Trp Ile Leu Tyr Ala Glu Gln
185      35          40          45
187      Asp Ser
188      50
190 (2) INFORMATION FOR SEQ ID NO: 8:
192      (i) SEQUENCE CHARACTERISTICS:
193          (A) LENGTH: 60 amino acids
194          (B) TYPE: amino acid
195          (D) TOPOLOGY: linear
197      (ii) MOLECULE TYPE: peptide
201      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 8:
203      Ser Thr Val Glu Cys Lys Ala Val Met Val Phe Phe His Tyr Cys Val
204      1          5          10          15
206      Val Ser Asn Tyr Phe Trp Leu Phe Ile Glu Gly Leu Tyr Leu Phe Thr
207      20          25          30
209      Leu Leu Val Glu Thr Phe Phe Pro Glu Arg Arg Tyr Phe Tyr Trp Tyr
210      35          40          45
212      Thr Ile Ile Gly Trp Gly Thr Pro Thr Val Cys Val
213      50          55          60
215 (2) INFORMATION FOR SEQ ID NO: 9:
217      (i) SEQUENCE CHARACTERISTICS:
218          (A) LENGTH: 26 amino acids
219          (B) TYPE: amino acid
220          (D) TOPOLOGY: linear
222      (ii) MOLECULE TYPE: peptide
226      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 9:
228      Thr Ala Leu Trp Trp Val Ile Lys Gly Pro Val Val Gly Ser Ile Met
229      1          5          10          15
231      Val Asn Phe Val Leu Phe Ile Gly Ile Ile

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232          20          25
234 (2) INFORMATION FOR SEQ ID NO: 10:
236   (i) SEQUENCE CHARACTERISTICS:
237       (A) LENGTH: 19 amino acids
238       (B) TYPE: amino acid
239       (D) TOPOLOGY: linear
241   (ii) MOLECULE TYPE: peptide
245   (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 10:
247   Ile Leu Val Gln Lys Leu Gln Ser Pro Asp Met Gly Gly Asn Glu Ser
248       1          5          10          15
250   Ser Ile Tyr
253 (2) INFORMATION FOR SEQ ID NO: 11:
255   (i) SEQUENCE CHARACTERISTICS:
256       (A) LENGTH: 76 amino acids
257       (B) TYPE: amino acid
258       (D) TOPOLOGY: linear
260   (ii) MOLECULE TYPE: peptide
264   (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 11:
266   Leu Arg Leu Ala Arg Ser Thr Leu Leu Leu Ile Pro Leu Phe Gly Ile
267       1          5          10          15
269   His Tyr Thr Val Phe Ala Phe Ser Pro Glu Asn Val Ser Lys Arg Glu
270       20          25          30
272   Arg Leu Val Phe Glu Leu Gly Leu Gly Ser Phe Gln Gly Phe Val Val
273       35          40          45
275   Ala Val Leu Tyr Cys Phe Leu Asn Gly Glu Val Gln Ala Glu Ile Lys
276       50          55          60
278   Arg Lys Trp Arg Ser Trp Lys Val Asn Arg Tyr Phe
279       65          70          75
281 (2) INFORMATION FOR SEQ ID NO: 12:
283   (i) SEQUENCE CHARACTERISTICS:
284       (A) LENGTH: 33 amino acids
285       (B) TYPE: amino acid
286       (D) TOPOLOGY: linear
288   (ii) MOLECULE TYPE: peptide
292   (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 12:
294   Asp Phe Lys His Arg His Pro Ser Leu Ala Ser Ser Gly Val Asn Gly
295       1          5          10          15
297   Gly Thr Gln Leu Ser Ile Leu Ser Lys Ser Ser Ser Gln Ile Arg Met
298       20          25          30
300   Ser
303 (2) INFORMATION FOR SEQ ID NO: 13:
305   (i) SEQUENCE CHARACTERISTICS:
306       (A) LENGTH: 29 amino acids
307       (B) TYPE: amino acid
308       (D) TOPOLOGY: linear
310   (ii) MOLECULE TYPE: peptide
314   (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 13:
316   Met His Ser Asp Cys Ile Phe Lys Lys Glu Gln Ala Met Cys Leu Glu
317       1          5          10          15

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319      Lys Ile Gln Arg Val Asn Asp Leu Met Gly Leu Asn Asp
320          20                      25
322 (2) INFORMATION FOR SEQ ID NO: 14:
324      (i) SEQUENCE CHARACTERISTICS:
325          (A) LENGTH: 476 amino acids
326          (B) TYPE: amino acid
327          (D) TOPOLOGY: linear
329      (ii) MOLECULE TYPE: protein
333      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 14:
335      Met His Ser Asp Cys Ile Phe Lys Lys Glu Gln Ala Met Cys Leu Glu
336      1          5          10          15
338      Lys Ile Gln Arg Val Asn Asp Leu Met Gly Leu Asn Asp Ser Ser Pro
339          20                      25          30
341      Gly Cys Pro Gly Met Trp Asp Asn Ile Thr Cys Trp Lys Pro Ala His
342          35          40          45
344      Val Gly Glu Met Val Leu Val Ser Cys Pro Glu Leu Phe Arg Ile Phe
345          50          55          60
347      Asn Pro Asp Gln Val Trp Glu Thr Glu Thr Ile Gly Glu Phe Gly Phe
348          65          70          75          80
350      Ala Asp Ser Lys Ser Leu Asp Leu Ser Asp Met Arg Val Val Ser Arg
351          85          90          95
353      Asn Cys Thr Glu Asp Gly Trp Ser Glu Pro Phe Pro His Tyr Phe Asp
354          100         105         110
356      Ala Cys Gly Phe Glu Glu Tyr Glu Ser Glu Thr Gly Asp Gln Asp Tyr
357          115         120         125
359      Tyr Tyr Leu Ser Val Lys Ala Leu Tyr Thr Val Gly Tyr Ser Thr Ser
360          130         135         140
362      Leu Val Thr Leu Thr Thr Ala Met Val Ile Leu Cys Arg Phe Arg Lys
363          145         150         155         160
365      Leu His Cys Thr Arg Asn Phe Ile His Met Asn Leu Phe Val Ser Phe
366          165         170         175
368      Met Leu Arg Ala Ile Ser Val Phe Ile Lys Asp Trp Ile Leu Tyr Ala
369          180         185         190
371      Glu Gln Asp Ser Asn His Cys Phe Val Ser Thr Val Glu Cys Lys Ala
372          195         200         205
374      Val Met Val Phe Phe His Tyr Cys Val Val Ser Asn Tyr Phe Trp Leu
375          210         215         220
377      Phe Ile Glu Gly Leu Tyr Leu Phe Thr Leu Leu Val Glu Thr Phe Phe
378          225         230         235         240
380      Pro Glu Arg Arg Tyr Phe Tyr Trp Tyr Ile Ile Ile Gly Trp Gly Thr
381          245         250         255
383      Pro Thr Val Cys Val Ser Val Trp Ala Met Leu Arg Leu Tyr Phe Asp
384          260         265         270
386      Asp Thr Gly Cys Trp Asp Met Asn Asp Asn Thr Ala Leu Trp Trp Val
387          275         280         285
389      Ile Lys Gly Pro Val Val Gly Ser Ile Met Val Asn Phe Val Leu Phe
390          290         295         300
392      Ile Gly Ile Ile Val Ile Leu Val Gln Lys Leu Gln Ser Pro Asp Met
393          305         310         315         320

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VERIFICATION SUMMARY

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L:40 M:220 C: Keyword misspelled or invalid format, [(A) APPLICATION NUMBER:]

L:41 M:220 C: Keyword misspelled or invalid format, [(B) FILING DATE:]